

Marino\WARE® Product Submittal Data

PRODUCT NAME: 1400S350-54

MARINO\WARE PART # 140SW16

05.40.00 Cold-Formed Metal Framing

PROPERTIES:

A. Web (in)	14"	Yield Strength Fy (KSI)	50
B. Flange (in)	3-1/2"	Tensile Strength Fu (KSI)	65
C. Lip (in)	1"	Design Thickness (in)	0.0566
Mils	54	Minimum Thickness (in)	0.0538
Available Finish	G60	Gauge	16

SECTION PROPERTIES

GROSS SECTION PROPERTIES

Cross Sectional Area: A (in ²)	1.28
Weight of Member: (lb/ft)	4.349
Moment of Inertia: I_x (in ⁴)	35.839
Section Modulus: S_x (in ³)	5.120
Radius of Gyration: R_x (in)	5.296
Gross Moment of Inertia: I_y (in ⁴)	1.947
Gross Radius of Gyration: R_y (in)	1.234

EFFECTIVE SECTION PROPERTIES

Moment of Inertia-Deflection: I_{xe} (in ⁴)	30.915
Section Modulus: S_{xe} (in ³)	3.249
Allowable Local Bending Moment: M_{al} (in-k)	97.28
Allowable Distortional Bending Moment: M_{ad} (in-k)	85.30
Allowable strong axis shear away from punch: V_{ag} (lb)	1176
Allowable strong axis shear at punch: V_{anet} (lb)	1176

TORSIONAL SECTION PROPERTIES

St. Venant Torsional Constant: J_{x1000} (in ⁴)	1.365
Torsional Warping Constant: C_w (in ⁶)	76.252
Shear Center to Centroid on Principal X-axis: X_o (in)	-2.207
Shear Center to Mid-Plane of the Web: m (in)	1.400
Radius of Gyration on the Centroid Principal axis: R_o (in)	5.868
Torsional Flexural Constant: β 1-(x _o /R _o) ²	0.859

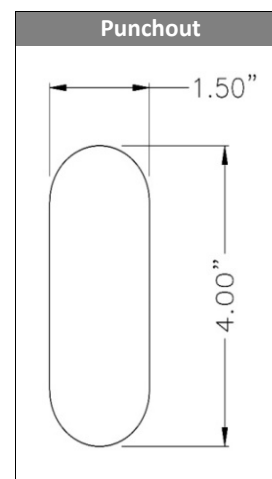
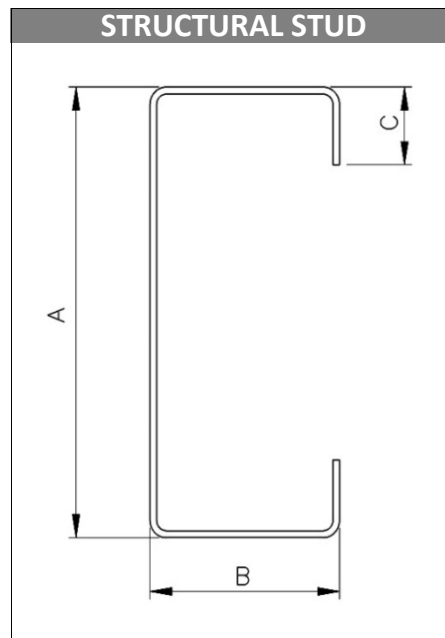
CODES & STANDARDS

- AISI S100, S240 & ICC ES ESR-4062
- ASTM A 1003, A 653, & C 955
- IBC 2012, 2015, 2018, 2021 & FBC 2020, 2023

GREEN INFO

- LEED credits available
- Contact Technical Services for more information.

Note: Web depth to thickness ratio (h/t) exceeds 200. Web stiffeners required at all support points and concentrated loads.



For more information, please contact Marino\WARE Technical Services at 866-545-1545.

This technical information reflects the most current information available and supersedes any and all publications, effective 11/5/2023
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